Problem M: The Missing Number

In one of my travels through the Eastern Hemisphere, I met a mathematics professor who was very clever at mental arithmetic and excelled at strange calculations performed by rules or tricks that he would rarely explain.

One of his favourite tricks consisted in asking a volunteer to arrange the ten digits $0, 1, 2, \ldots, 9$ into two rows, forming two integer numbers, then add the two numbers, and finally erase the two original numbers and one positive digit from the answer, which he would then restore immediately upon reading the remaining digits —much to the amazement of the spectators.

For example, let's say that somebody chose an arrangement that formed the two numbers 342195 and 6087. Then he would write the following:

```
   342195
+    6087
=  348282
```

If the volunteer then chose to erase the third digit from right to left, it would leave:

```
=  348_82
```

From which the professor would find that the missing number is a two in an instant.

What's the digit he's looking for?

Can you replicate the professor's trick and find out the missing digit from the remaining numbers on the bottom row?

Input

Input starts with a positive integer **T**, that denotes the number of test cases.

Each test case is given in a line that contains a string of characters. The string represents the result after arranging the digits 0…9 into two rows, performing the addition, and then erasing the original numbers and one positive digit from the sum.

The string is formed by digits and exactly one underline character (_) that indicates the position of the missing number.

$T \leq 10000$

Output

For each test case, print the case number, and then the missing digit.

Sample Input	Output for Sample Input
2 348_82 1_1341	Case 1: 2 Case 2: 8